

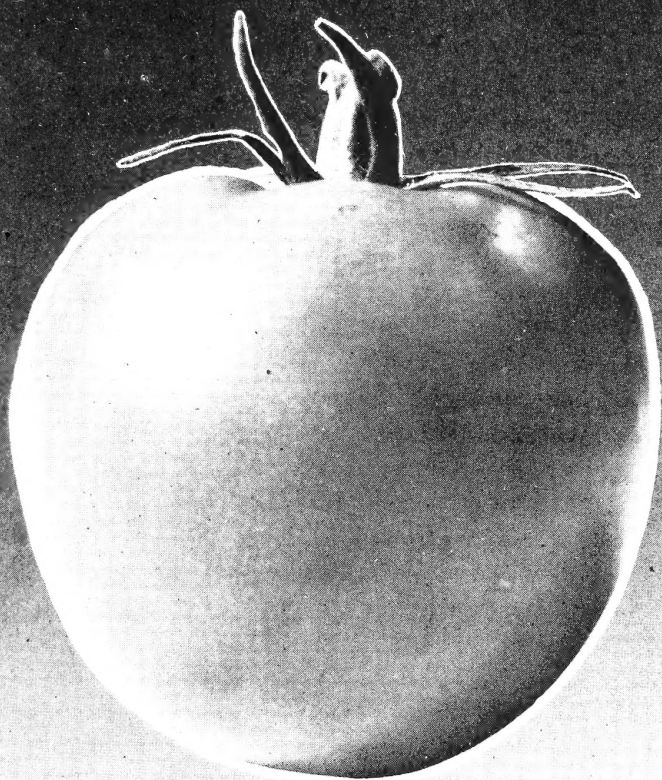
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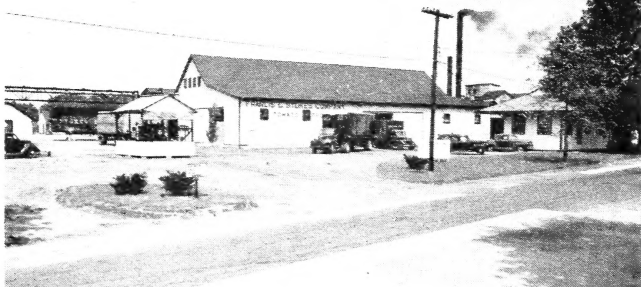
# **Stokes**

## **TOMATO SEED**



**FOR**

**FINER TOMATOES**



*The Stokes establishment at Vincentown, New Jersey.*



*Prof. L. G. Schermerhorn, father of the Rutgers Tomato, addressing a Field Day at Vincentown.*



*Stokes Proving Grounds are the home of Stokes Foundation Stocks.*  
Copyright 1949 F. C. S. Co.

## **Tomatoes can be your best source of profit if you plant the new seed stocks, and follow the rules.**

Stokes-bred tomato seed is grown for that one man in a hundred who is a perfectionist when it comes to tomatoes. It is produced by a family which has been working on tomatoes for sixty-eight years. The Stokes program of seed development and production is one of precision, thoroughness and control at every stage. Stokes Tomato Seed is the starting point for brilliant uniformity and high production. These inspired stocks have brought high profits and deep satisfaction to thousands of planters. We take pride in bringing them to you.

Two separate classes of tomatoes are offered in this booklet—five Stokes-cross  $F_2$  Hybrids—all new; and Foundation Stocks of nine open-pollinated varieties, all grown on Stokes Proving Grounds. Any one of these, in its class, will give a distinguished performance. Hybrid tomatoes open a new and alluring future to the industry. No grower can overlook the factors of increased vigor, higher production, and fine flavor of a hybrid tomato. The Foundation Stocks from Stokes Proving Grounds have long been famous. This is the mother seed from which Stokes Tomato Seed is produced. It is offered to you only one generation removed from the original single plant selections, and as such brings you very close to the heart of the Stokes breeding program.

Any of the matchless seed stocks described in this booklet can place you in the front ranks of tomato growers. Those who plant this seed will enjoy the acknowledged advantage gained from Stokes' years of concentration on tomatoes. There is a strange fascination in reaching out for perfection. This can be yours if you plant Stokes-bred Tomato Seed. Tomatoes can easily be your best source of profit, whether you grow five hundred plants, or five hundred acres.

A handwritten signature in cursive script that reads "Francis C. Stokes". The signature is written in dark ink and is positioned above the word "President".

President

**Rule One**—Limit your acreage to your capacities. Ten well grown acres are far more profitable than 25 badly grown acres.

**Land**—1. It must be well drained.

2. Plant tomatoes on it not oftener than one year in four.
3. Aim for an organic matter test of not under 2%. Add lime for pH of 6.5.
4. Plow down cover crops, sod, corn stalks, soy beans, etc.

**Seed**—Your choice can make or break your profit. Never take seed for granted. Fix on your main objective—earliness, size, production, shape, color, solidity, etc. (you will know what factors come first), then go on from there, remembering that your choice of seed is a vital choice. Second class seed will keep you in that class. The variety chart in this booklet will bear study.

**Transplanting**—There is always an optimum time for your area. Meet this whenever possible. The earlier transplanting usually brings the heavier harvest. Allow 16 sq. ft. for plants of full foliage. (We like 6 ft. rows for those varieties), but in every case make your row width fit your spray rigs. We definitely favor keeping every fourteenth row open. Use a pint of starter solution for each plant. A good mixture is: 13-26-13 or 5-25-15.

We also recommend quick dipping of the foliage in: Lead arsenate  $\frac{1}{2}$  lb., 66% oil emulsion  $\frac{1}{2}$  pt., in  $12\frac{1}{2}$  gallons water.

**Foliage Retention**—This is essential for heavy production, color, flavor and normal Vitamin C. Foliage can be retained during the entire harvest, year in and year out, with proper drainage, balanced nutrition and adequate spraying. One careful spraying is worth two ground dustings, or four dustings by plane.

**Fruit Setting**—There are many factors: 1. Control plant feeding. An over-vegetative plant will not set its blossoms. 2. For heavy vine types, delay nitrogen applications until the main setting period is past. 3. Stop irrigation while blossoms are forming. 4. Night temperatures below 54 degrees are not good. Usually a spread in excess of 25 degrees between night and day temperatures is not good. Day temperatures above an official 95 degrees will drop most blossoms. 5. Blossom

# TOMATO PRODUCTION

thrip, and other minute insects which eat pollen, have caused serious fruit set losses. They are almost microscopic and are easily missed. They can be controlled by dusting every five days commencing with the first buds. Talc should be the base, ten pounds should be used per acre. The most satisfactory product for thrip control is chlordan. Make a 5% concentration.

**Cracking**—Strong, uninterrupted growth of plant and fruit will usually reduce cracking. The increased vigor of hybrid tomatoes may account for less cracking. This no doubt results from *continuous* growth. A stand-still condition, followed by sudden growth after rain or heavy mist, usually results in cracking. Further study is being given to this subject.

**Fruit Color**—A vine-ripened tomato from a healthy plant will have good color if its heredity is correct. Most tomatoes are picked far too soon. (Many do not receive proper harvesting supervision.) Keep this in mind: temperature in excess of 95° is bad for color. The red pigment does not form above that point. Clay soil, high in potash, adds color.

## Spray Schedule:

Apply the first spray 30 days after transplanting, and follow every 10 days for a total of seven sprays as follows:

- |            |                           |
|------------|---------------------------|
| 1. Zerlate | 6. Copper*                |
| 2. Zerlate | 7. Copper                 |
| 3. Copper  | *If no late blight change |
| 4. Zerlate | this to Zerlate           |
| 5. Copper  |                           |

If late blight threatens, additional copper sprays must be applied after the seventh spray. Solutions:

2 lbs. zerlate to 100 gallons water.

4 lbs. fixed copper to 100 gallons water.

Add four pounds calcium arsenate to each 100 gallons of water.

Apply at the rate of 150 gallons per acre under at least 50 pounds pressure.

## Plants per acre:

2 x 3 ft.	7260	3 x 5 ft.	3901
2 x 4 ft.	5445	3 x 6 ft.	2420
2 x 5 ft.	4356	4 x 4 ft.	2723
3 x 4 ft.	3630	4 x 5 ft.	2178

## **The F<sub>2</sub> Stokescross\* Hybrids offer all tomato growers unusual opportunities. You have five to choose from.**

Francis C. Stokes Company has the honor of announcing the introduction of five F<sub>2</sub> Hybrid Tomatoes. These closed-formula, second generation hybrids will be sold under the registered trade-mark STOKES-CROSS,\* and will be identified by numbers. We suggest a careful examination of the variety chart in this booklet, and of the variety descriptions. No one Stokescross hybrid will fill all requirements. No. 1, No. 2 and No. 3 will be of interest to those growers who depend primarily on early maturity. No. 4 and No. 5 will mature in the 70 to 75 day range from transplanting. These have great vitality. The astonishing hybrid vigor of the Stokescross tomatoes will, in varying degrees, develop these advantages:

1. Production increase up to 30%.
2. Earlier, more continuous, and more profuse fruit setting.
3. A more extended harvest season.
4. Distinctive qualities of color, flavor and firmness.
5. Far less cracking of fruit.

Hybrid tomatoes offer all tomato growers very strong advantages. By giving them your best they will repay you handsomely. You cannot afford to overlook them. Whether you are growing tomatoes in the greenhouse, in the home garden, or whether you grow for the nearby or distant market, for the processor, or for the repacker, the range of usefulness of the Stokescross Hybrids covers all of North America. They are the latest development in Stokes' long years of specialization in tomatoes. We are proud to offer them to you.

\*Trade-mark Registered.



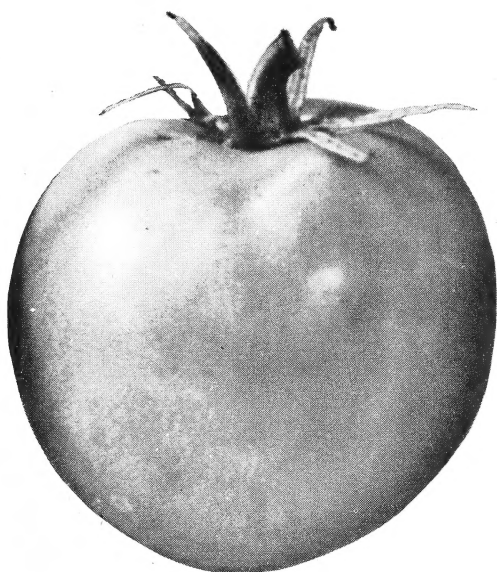
*Stokes hybrid tomato breeding dates back to 1942.*



# STOKESCROSS\* NO. 1

*Extra early—55 days. 3 oz.*

*Largely crack-free.*



This fast-growing  $F_2$  hybrid will mature earlier than any tomato on our list. Its three ounce size is a restricting factor, but for those growers who desire a tomato with hybrid vigor that will mature fifty-five days from transplanting, Stokes-cross No. 1 will prove of value. Plants may be set as close as 2 x 3 feet, for the foliage is light. Table quality is excellent, and will be highly prized. Color and flavor are unique. The fact that it is largely crack-free is of importance. Recent introductions have moved the frontier of tomato production north by a thousand miles. Stokes-cross No. 1 is such a tomato.

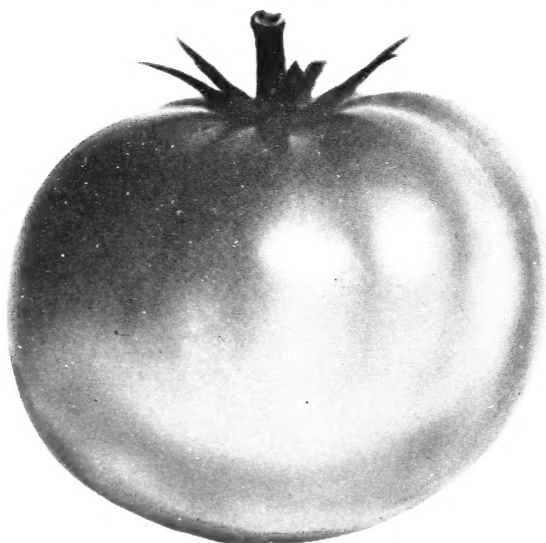


*Increased hybrid vigor is now an accepted fact.*

# STOKESCROSS\* NO. 2

*Second early—60 days. 4 oz.*

*Largely crack-free.*



This  $F_2$  hybrid has been developed for those desiring a four ounce tomato of the highest table quality, maturing within sixty days of transplanting to the field. The fact that Stokes-cross No. 2 is virtually crack-free, even when fully ripened, is one of its strong features. The foliage, although light, is adequate for normal protection from the sun. The bright appearance, the high color and flavor assure the success of this tomato for the home gardener, or for any market where full size is not required. Its production record is heavy. In its class, and under proper growing conditions, Stokes-cross No. 2 will be highly prized.

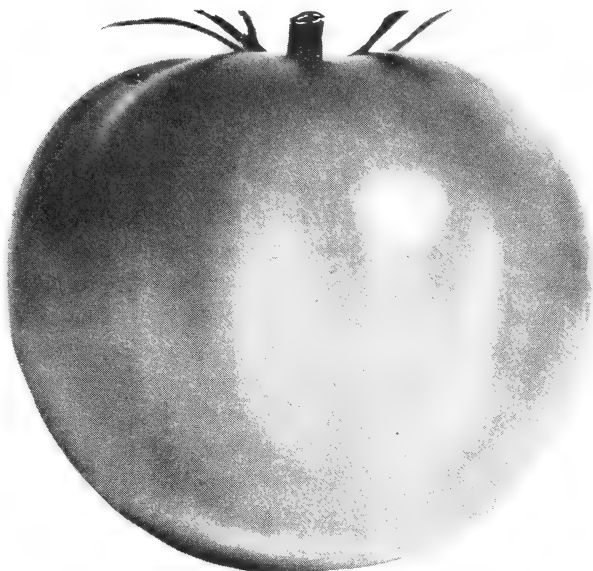


*The photos on these two pages indicate the health of trellised tomatoes.*

# STOKESCROSS\* NO. 3

*Second early—65 days. 5 oz.*

*Profuse bearer.*



This F<sub>2</sub> hybrid will mature a profusion of five ounce tomatoes within sixty-five days after transplanting. For those seeking a tomato which will set profusely and ripen its fruit quickly, Stokes-cross No. 3 is strongly recommended. In its perfection of style, it resembles Stokesdale, but the fruit will be larger and the vine more vigorous and productive. This hybrid has been developed for the shipping trade, but in the more northerly areas, where the season is shorter, it will have special value for processors. No. 3 will not be available until September, 1950.

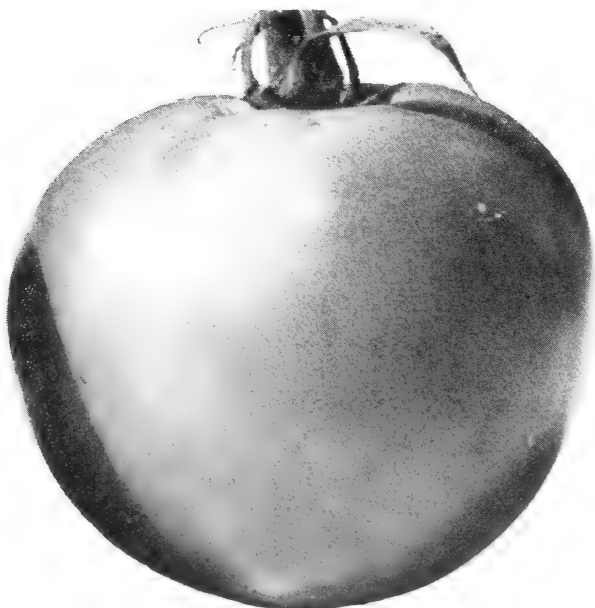


*Mr. Wm. Maurer was the designer of the Stokes Tomato Trellis.*

# STOKESCROSS\* NO. 4

**Early-main 70 days. 6 oz.**

**Brilliant appearance.**



The compelling feature of this  $F_2$  hybrid is its ability to produce large, brilliant, smooth tomatoes, ten days earlier than Rutgers. The medium foliage will set fruit in profusion when other heavier-vined varieties are setting little, if at all. Under balanced conditions because of its hybrid vigor, it develops a continuous growth of root, vine and fruit. We presume that this factor is responsible for less fruit cracking. Together, these features hold great promise for the future usefulness of Stokes No. 4—for the gardener, the shipper, and the processor. Commercial quantities will not be available until September, 1950. Packets are on sale now.

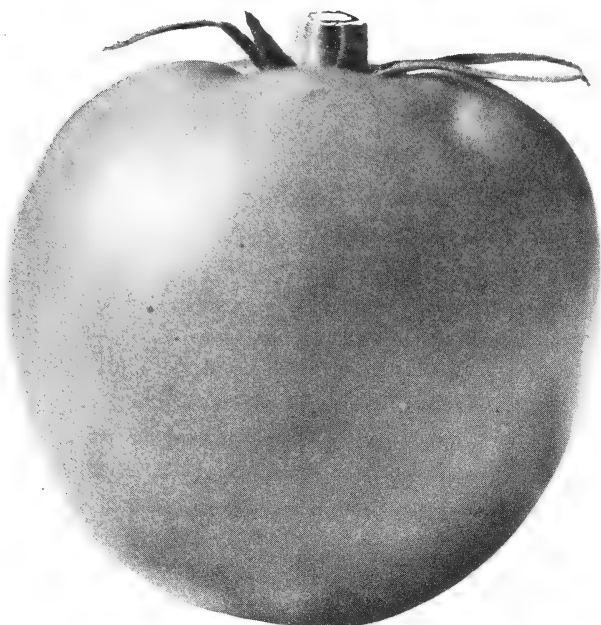


*Medium vine, heavy set and perfectly formed 6 ounce fruit distinguish Stokes No. 4.*

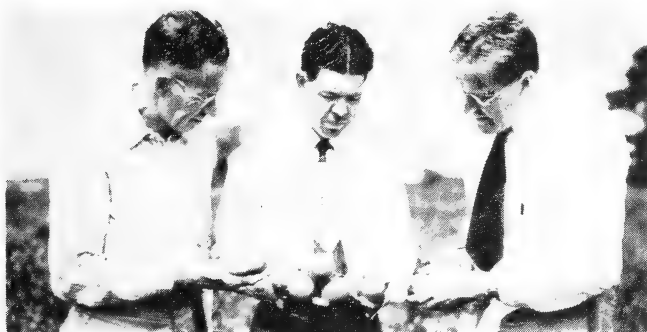
# STOKESCROSS\* NO. 5

*Early-main 75 days. 6 oz.*

*Long strong harvest.*



This tomato is distinguished by its amazing vigor. Production increase up to 30% is not unusual. Due to its early maturing first hands, and a continuing harvest of large, smooth-shouldered fruit, the picking season is extended by at least two weeks. The unusual vigor of Stokes No. 5 will at once be recognized by tomato growers. This directly contributes to its high color and rich flavor. No. 5 was bred essentially as a processing tomato, but it has proven to be extremely profitable on the green wrap and climax basket markets. Market reports indicate that Stokes No. 5 far outsold competing open-pollinated varieties.



*Two Texans, Messrs. Lou Piper and Dean Porter in Stokes Proving Grounds, examining Stokes No. 5 Hybrids with Mr. Stokes.*

# STOKES CHART OF

<b>F<sub>2</sub> HYBRIDS</b>	<b>Days to maturity after transplanting</b>	<b>Harvest season</b>	<b>Av. fruit size in ounces</b>	<b>Depth to width ratio percent</b>	
<b>Stokescross* No. 1</b>	55	Extra early	3	80	
<b>Stokescross* No. 2</b>	60	Extra early	4	80	
<b>Stokescross* No. 3</b>	65	Early	5	90	
<b>Stokescross* No. 4</b>	70	Early—Main	6	90	
<b>Stokescross* No. 5</b>	75	Early—Main	6	88	

## FOUNDATION STOCKS

<b>Valiant</b>	65	Extra early	5	88	
<b>Stokesdale</b>	70	Early	5	90	
<b>Trellis 22</b>	70	Early—Main	3½	80	
<b>Waltham Forcing</b>	68	Early—Main	3½	80	
<b>Gem</b>	70	Early—Main	5¾	85	
<b>Red Jacket</b>	72	Early—Main	6½	88	
<b>Longred</b>	78	Main	6	92	
<b>Marglobe</b>	80	Main	5½	90	
<b>Rutgers</b>	85	Main	6½	86	

\*Trade-mark Registered

# TOMATO VARIETIES

Foliage	Recommended spacing in feet	Recommended Fertilization	Strong Points	Trellis
light	2 x 3	1500 lbs. 5-10-10 plus one sidedress	Extreme earliness. Freedom from cracking	No
light	2 x 4	1500 lbs. 5-10-10 plus one sidedress	High color and flavor Freedom from cracking.	No
light	3 x 5	1500 lbs. 5-10-10 plus two sidedress	Earliness and profusion of perfect fruit	Yes
medium	3 x 5	1000 lbs. 0-20-20 plus three sidedress 5-10-10	Style. Sure setting Earliness	Yes
heavy	3 x 6	1000 lbs. 0-20-20 plus three sidedress 5-10-10	Vigorous Heavy cropping Long bearing	Yes
light	2 x 5	1200 lbs. 5-10-10 plus three sidedress	Earliness, Size Internal structure	No
medium	3 x 5	1200 lbs. 5-10-10 plus two sidedress	Style of fruit Profusion of set	Yes
medium	3 x 4	2000 lbs. 5-10-10 plus two sidedress	Highly prized in New England for trellising.	Yes
medium	3 x 4	2000 lbs. 5-10-10 plus two sidedress	Greenhouse Forcing	Yes
leafy	2 x 5	2000 lbs. 5-10-10 plus two sidedress	Heavy yield. Easy to pick. Easy to spray	No
heavy to leaf	3 x 6	1000 lbs. 5-10-10 plus two sidedress	High color and flavor Concentrated set	No
medium, heavy to leaf	3 x 5	1500 lbs. 5-10-10 plus two sidedress	Style, color and depth of fruit	Yes
heavy	3 x 6	1500 lbs. 5-10-10 plus one sidedress	Style, firmness and perfection of fruit	Yes
heavy	3 x 6	1000 lbs. 0-20-20 plus 5-10-10 one sidedress	Size, vigor and production	Yes





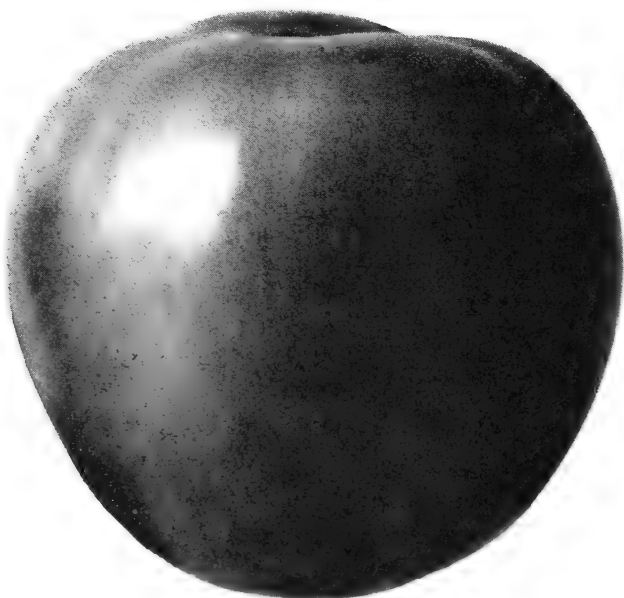
# STOKES CHART OF TOMATO VARIETIES

F <sub>2</sub> HYBRIDS	Days to maturity after transplanting	Harvest season	Av. fruit size in ounces	Depth to width ratio percent	Foliage	Recommended spacing in feet	Recommended Fertilization	Strong Points	Trellis
Stokescross* No. 1	55	Extra early	3	80	Very light	2 x 3	1500 lbs. 5-10-10 plus one sidedress	Extreme earliness. Freedom from cracking	No
Stokescross* No. 2	60	Extra early	4	80	Light	2 x 4	1500 lbs. 5-10-10 plus one sidedress	High color and flavor Freedom from cracking.	No
Stokescross* No. 3	65	Early	5	90	Light	3 x 5	1500 lbs. 5-10-10 plus two sidedress	Earliness and profusion of perfect fruit	Yes
Stokescross* No. 4	70	Early—Main	6	90	Medium	3 x 5	1000 lbs. 0-20-20 plus three sidedress 5-10-10	Style. Sure setting Earliness	Yes
Stokescross* No. 5	75	Early—Main	6	88	Heavy	3 x 6	1000 lbs. 0-20-20 plus three sidedress 5-10-10	Vigorous Heavy cropping Long bearing	Yes
FOUNDATION STOCKS									
Valiant	65	Extra early	5	88	Light	2 x 5	1200 lbs. 5-10-10 plus three sidedress	Earliness, Size Internal structure	No
Stokesdale	70	Early	5	90	Medium	3 x 5	1200 lbs. 5-10-10 plus two sidedress	Style of fruit Profusion of set	Yes
Trellis 22	70	Early—Main	3½	80	Medium	3 x 4	2000 lbs. 5-10-10 plus two sidedress	Highly prized in New England for trellising.	Yes
Waltham Forcing	68	Early—Main	3½	80	Medium	3 x 4	2000 lbs. 5-10-10 plus two sidedress	Greenhouse Forcing	Yes
Gem	70	Early—Main	5¾	85	Dwarf	2 x 5	2000 lbs. 5-10-10 plus two sidedress	Heavy yield. Easy to pick. Easy to spray	No
Red Jacket	72	Early—Main	6½	88	Heavy plicate leaf	3 x 6	1000 lbs. 5-10-10 plus two sidedress	High color and flavor Concentrated set	No
Longred	78	Main	6	92	Med. heavy fine leaf	3 x 5	1500 lbs. 5-10-10 plus two sidedress	Style, color and depth of fruit	Yes
Marglobe	80	Main	5½	90	Heavy	3 x 6	1500 lbs. 5-10-10 plus one sidedress	Style, firmness and perfection of fruit	Yes
Rutgers	85	Main	6½	86	Heavy	3 x 6	1000 lbs. 0-20-20 plus 5-10-10 one sidedress	Size, vigor and production	Yes

\*Trade-mark Registered

# STOKES FOUNDATION STOCK VALIANT

*Extra Early. Extra Solid. Extra Large.*



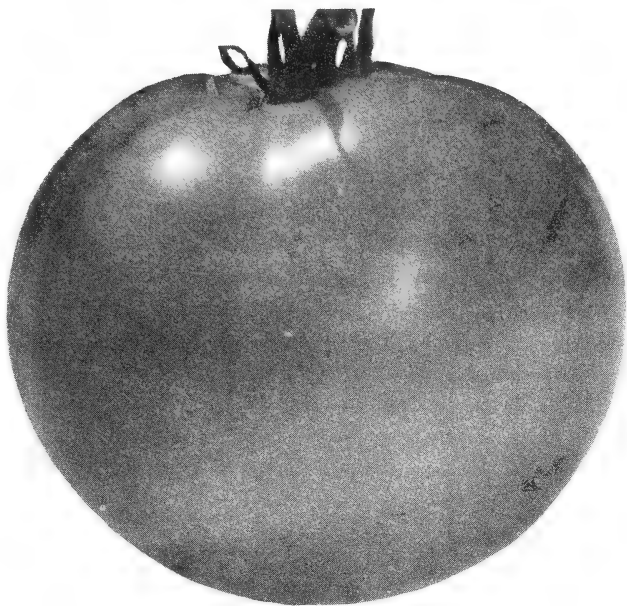
Valiant, a Stokes introduction of 1936, is an out-cross that has made a valued contribution to the tomato industry of the United States and Canada. It is a half-brother of Stokesdale. Valiant will develop a Marglobe type fruit within three days of the older Earliana (Johnson and Stokes, 1901). It has a sparse, open vine which will not always protect the fruit from the sun, but in its special field—the early market—it is highly prized. Valiant will be most successful on heavy loam. Generous applications of fertilizer are recommended. You buy the best Valiant when you buy this stock.



*For best results Valiant should be produced as an extra-early tomato.*

# STOKES FOUNDATION STOCK STOKESDALE

*Second Early. Profuse Bearer. Perfect Fruit.*



Stokesdale, a Stokes introduction of 1936, comes from the same single-row source as Valiant. The two have brought wealth and satisfaction to tomato growers, and have contributed valuable parent material in various hybrids. Stokesdale, as developed and maintained by the originator, will produce a five ounce tomato five days later than Valiant. The fruit type reaches a perfection seldom attained. The vine growth is usually sufficient to prevent sunburn. Stokesdale has very largely replaced Bonny Best (Stokes 1907) because of its profuse setting, and early maturing fruit.



*Stokesdale sets fruit readily and early. Feed it well.*

# STOKES FOUNDATION STOCK TRELLIS 22

*A highly prized trellising tomato.*



*Trellis 22 is an enormous producer of hard, firm tomatoes. Highly recommended for outdoor trellis production.*

*Photo courtesy of Waltham Field Station.*

Trellis 22, an introduction of the Waltham, Mass. Experiment Station, 1937, is probably the most successful of their several introductions. The fruit will average 3½ ounces. It is best known by the market gardeners of Boston and New England. Trellis 22, developed from a cross between Waltham Forcing and Lloyd Forcing, is one of the so-called "hard" tomatoes. This factor of hardness is due to its tough skin and very solid interior. When trellised, pruned, irrigated, and heavily fertilized, yields of 50 tons per acre are not unusual. It sets more readily during cool weather. Tradesmen can keep Trellis 22 on their shelves for two weeks without loss. The Boston market wants a small tomato.

## WALTHAM FORCING

### ***Recommended for Greenhouse Production***

This is an introduction of the Waltham Field Station in 1935. It is a selection made by Dr. Robert E. Young from a local strain of Best of All, a Comet type. Again, the factor of fruit firmness is paramount. Waltham Forcing is one of the most successful varieties for growing in greenhouse. It has been bred for trellising. This seed is produced on Stokes Proving Ground directly from Waltham Station stock.

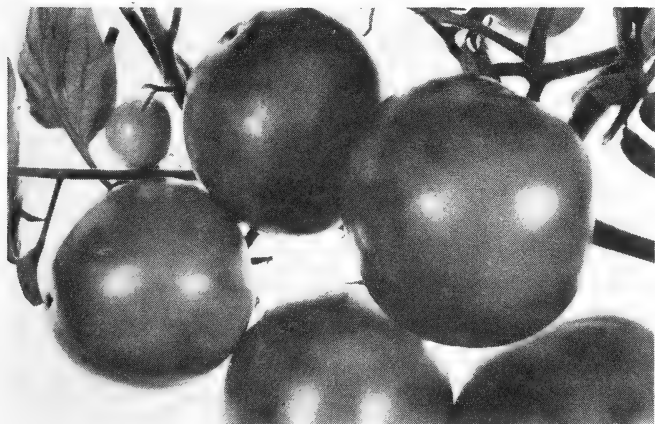
# STOKES FOUNDATION STOCK GEM

***Heavy yield. Easy to pick. Cannery type.***

Gem, an introduction of the New York State Experiment Station 1947. This variety was developed by Professor W. T. Tapley from a Bounty x Stokesdale cross. It holds the uniform color gene factors of Bounty, and the profuse setting habits of our Stokesdale. The plant is extremely dwarf in habit. Because of that at least two thousand pounds 5-10-10 fertilizer should be applied per acre. Crops of 25 to 30 ton per acre are not uncommon. It is doubtful if we have ever seen such a profuse bearer as Gem. We do not recommend it for sandy loam soils. It is sometimes susceptible to Early Blight and should be sprayed.

Under well balanced conditions of soil, temperature and rain fall, this variety produces an almost solid layer of fruit three to four feet wide in the row. In fact, almost comparable to a red carpet. It is remarkably successful in New York State. Will without doubt be repeated in other areas.

**Fruit Size**—Inheritance is a vital factor. There is a wide spread between strains and between varieties. But it must be remembered that a tomato is 96% water. Long drought reduces size, and high temperatures ripen fruit prematurely. Moderate and well timed irrigation will increase size and yield. There is a direct correlation between the number of fruit set, and the size of fruit.



***Gem has succeeded admirably as a New York State cannery type. It is a prodigious bearer. Foliage restricted. Feed heavily.***

*Photo courtesy New York State Exp. Station.*

# STOKES FOUNDATION STOCK RED JACKET

*Potato leaf. Fine flavor. Brilliant color.*



*Red Jacket, a potato leaf tomato, highly praised by the canners of Western New York. Flavor and color are factors in this.*

Red Jacket, an introduction of the New York State Experiment Station 1947. The variety was developed by Professor W. T. Tapley from a Bounty x Hosenfelt cross. It holds the uniform color gene factor of Bounty, and the potato leaf factor of Hosenfelt. It is a remarkable tomato and beyond doubt has an important future. The flavor of Red Jacket is one of its best features. The heavy concentration of fruit often allows the entire crop to be gathered in two pickings. It is a matter of great credit to Mr. Tapley, a member of the "Stokes Alumni Association," that his Gem, Red Jacket, and Longred in three years have already taken 50% of the New York State cannery acreage. The stock herein offered has been grown directly from stock seed from the Geneva Station.

Canners everywhere will do well to test Red Jacket under varying conditions. It has unusual qualities of production, color and flavor that cannot fail to bring strong and favorable reaction by grower and processor. We predict an important future for Red Jacket.

# STOKES FOUNDATION STOCK LONGRED

*Deep, handsome fruit. Long bearing season.*



*Here again is a tomato with an extra slice. Market gardeners should not overlook it.*

Longred, an introduction of the New York State Experiment Station 1947. The variety was developed by Professor W. T. Tapley from a Victor x Valiant cross. It holds the uniform color gene of Victor and the depth of our Valiant. The result is a tomato of high style and polish. We recommend it as a tomato for the home gardener, the market gardener, the shipper and the processor. Longred is very prolific and requires strong feeding. It should be sprayed regularly. We have produced our Longred from seed supplied by the Geneva Station. Tomato growers in all sections should try Longred. Its production capacity is astonishing, its graceful style will immediately be recognized.

We recommend that Longred be given a generous tryout by all growers. It may be something you have long wanted. You will immediately recognize its strength and its unusual brilliance. Do not fail to test Longred.

**STOKES FOUNDATION STOCK**  
**MASTER MARGLOBE**  
*Perfection of fruit. A foremost shipper.*



*Stokes Master Marglobe, after 24 years still maintains its style and perfection. It has earned millions of dollars for the tomato industry.*

A U.S.D.A. introduction of 1926. It is a cross between Marvielle de Marche (Vilmorin) x Globe (Livingston) made and perfected by the late Dr. Fred E. Pritchard. Its high resistance to Fusarium Wilt and to Nail Head Rust virtually eliminated those diseases. After 23 years, Marglobe is still a very important shipping variety. This is in part due to the vigilance of the Stokes Company in maintaining their Master strain, which is generally looked upon as being one of the most perfectly formed market tomatoes in existence. This has an average weight of 5½ ounces, a depth to width ratio of 90%, smooth shoulders and a very solid interior.

Many of the most successful growers and shippers of tomatoes lean heavily on Stokes Master Marglobe. The same is true of innumerable greenhouse growers. It is a matter of common knowledge in the industry that the Stokes organization has carried much of the responsibility for maintaining this superb tomato.



# STOKES FOUNDATION STOCK RUTGERS

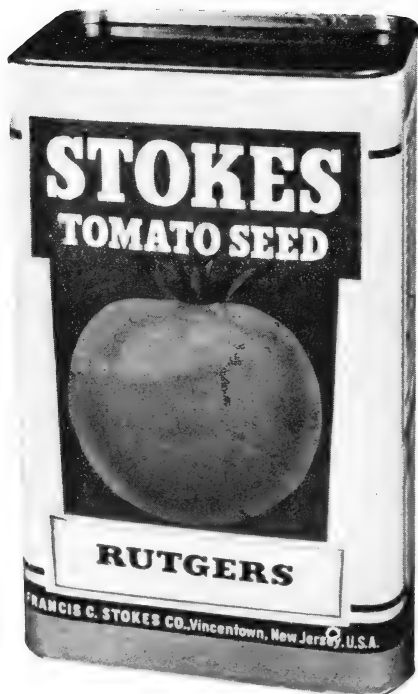
*Main Season. Large fruit. Heavy foliage.*



*The Stokes strain of Rutgers is large, deep, productive and vigorous. Hold back on fertilizer and on irrigation. Do not allow it to be over-vegetative.*

Introduced by Rutgers University in 1935. The result of a cross between J.T.D. (Campbell) x Marglobe (U.S.D.A.) and developed by Professor L. G. Schermershorn. With the exception of California, this remarkable variety has received wider adaptation in the United States than any other variety. The Stokes strain has been developed for 6 oz. size, fruit depth of 86% ratio, and a central stalk that will support a heavy set of fruit. Rutgers (Stokes) is a dual purpose variety, suitable as a shipper or for canner use.

Care should be taken to avoid an over-vegetative vine which prevents Rutgers from setting satisfactorily. This can be avoided by eliminating applications of nitrogen until after the main blossom set is completed. The same applies to irrigation. Rutgers is a steady grower, but will not set fruit adequately while making its main growth.



*This is the familiar tamper-proof canister carrying Stokes dependable tomato seed. It is one of the most respected seed packages in North America. While this booklet is devoted to the delux Stokescross Hybrids and Foundation Stocks, do not overlook the fact that Stokes Authorized Distributors also are able to quote at all times on the regular Stokes strains. These, too, are justly famous.*

## **A FINAL WORD**

1. Let us repeat—plant the very best seed. That is the Alpha and Omega of tomato growing. Any compromise on seed can spoil your whole effort. Far too many growers take their seed and plants for granted.

2. Set up a dated schedule for each operation, and, subject to weather changes, follow it.

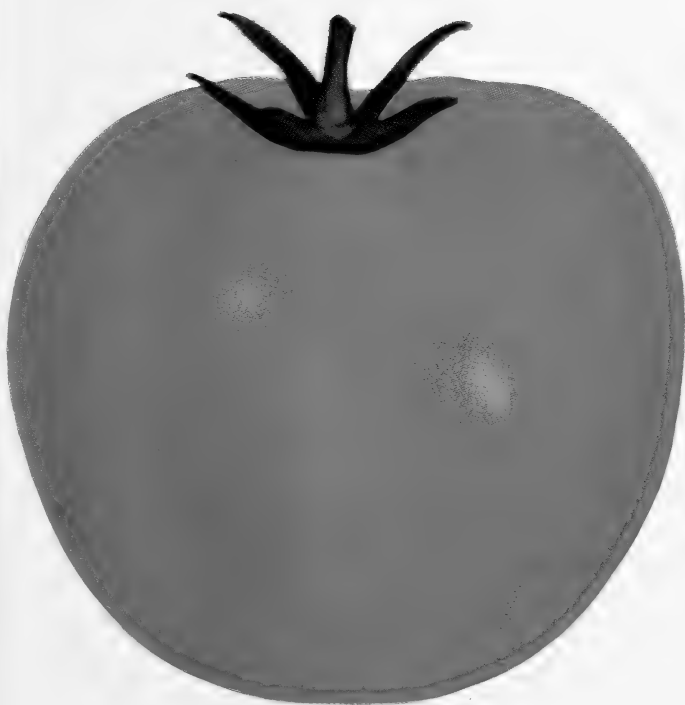
3. Study the production suggestions and the chart. They are supported by long experience. If they suggest changes in your routine, have the courage to try them.

4. Inspect your crop daily. Study its every need. Remember that *you* are the manager.

5. Aim for twelve pounds per plant, rather than twelve tons per acre. Concentrate on the individual plant. Be a perfectionist with your tomatoes, nurture them, protect and respect them. Make them pay you the high price. Tomato growing is a great challenge. Give it your best.

# **STOKES F<sub>2</sub> HYBRIDS**

**The Tomatoes of Tomorrow**



**STOKESCROSS NO. 4**

**Francis C. Stokes Company**

*Breeders and Growers of Fine Tomato Seeds*

Vincentown, New Jersey, U.S.A.

# These Five Stokescross F<sub>2</sub> Hybrids

Each has its distinct place. Two or more may be

*This is their background:*

Stokescross Hybrids are the product of crossing America's outstanding tomato stocks. For 69 years the Stokes organization has contributed to the tomato industry. It has never offered more valuable material. Stokes started hybridizing tomatoes in 1942. Now, thru two outdoor generations per year, great progress is evident. The summer breeding is carried on in Burlington County, New Jersey, the winter breeding in the Province of Santa Clara, Cuba. Stokescross Hybrids represent a long step forward for the tomato industry.

*What hybrid vigor means to you:*

The phenomenon of hybrid vigor is an established fact. In hybrid corn the annual dividend approximates \$750 million. The same generic principles apply to tomatoes and other crops. The first generation or F<sub>1</sub> tomato hybrid is extremely expensive. Stokes has specialized in developing F<sub>2</sub> lines which show almost no segregation. The Stokescross strains while largely retaining the F<sub>1</sub> characters, offer you these undisputed advantages: 1. Heavier production. 2. A lengthened harvest. 3. Richer color and flavor. 4. More solid interior. 5. Usually less cracking. (No tomato is as yet crack free when heavy rains follow drought.) The overall result is more and better quality fruit. In many instances, the gross cash income has been doubled.

## Stokescross No. 1 (1951)

4½ oz. fruit ripens 65 days from transplanting.

This new F<sub>2</sub> hybrid is recommended for the grower who profits from the extra early market. It is distinguished by a fabulous production of beautiful fruit. Its vine growth is restricted, but under normal summer temperatures, it affords the fruit sufficient coverage. Fruit sizes up well. Very solid. Will ship well. Has style. This is a brand-new Stokes-cross No. 1. It is not to be confused with the 1950 strain which was too small. *Garden Packets only, until August 15, 1951.*

## Stokescross No. 2 (1951)

4½ oz. fruit ripens 70 days from transplanting.

This new F<sub>2</sub> hybrid has been bred in Cuba at our Santa Clara breeding grounds. It is especially recommended for use by tomato growers who can profit by a prodigious production of early ripening, brilliant fruit. It is essentially a market garden tomato, but it is likely to find an important place with the processors of the more northerly tomato districts. The fruit somewhat resembles Stokesdale (Stokes 1936), but the plant is far more robust and will furnish better coverage. Stokescross No. 2 carries a sparkling rich tomato flavor. Do not confuse this with 1950 Stokescross No. 2 which was much smaller.

# is Come From Distinguished Lines

be needed to complete your tomato acreage.

## *Stokescross No. 3*

5 oz. fruit ripens 75 days from transplanting.

This completely new and distinct hybrid will not be available commercially until August 15, 1951. It promises to be in a class by itself. In developing this hybrid we especially had in mind a tomato more suitable to the important cellophane box tomato packers. (Their business has reached a volume in excess of \$100 million per year). This group is calling for a tomato of 4½ oz. size that is firm enough to be harvested at turning stage and carry some authentic tomato flavor to the consumer in the six month period when garden tomatoes are not available.

## *Stokescross No. 4*

5½ oz. fruit ripens 80 days after transplanting.

This brilliant F<sub>2</sub> hybrid is already established as a tomato of enormous importance. Its hybrid vigor is at once seen in its ability to produce large, solid, highly flavored fruit, in quantity, fully 10 days in advance of Rutgers. When adequately fertilized it will surpass Rutgers in production by a wide margin. As a canning tomato its deep red color and solid interior is especially noticeable. Under normal weather conditions it will be almost crack free, a factor probably due to its deeper root system.

## *Stokescross No. 5*

5½ oz. fruit ripens 85 days from transplanting.

Yields exceeding 30 tons per acre have been recorded for this distinguished F<sub>2</sub> hybrid. It has a long harvest season. Its hybrid vigor stands out in its heavy production of highly flavored and highly colored fruit. In normal weather Stokescross No. 5 carries much of the crack free qualities of No. 4. (No tomato is completely crack free following a heavy rain.) The interior of No. 5 is extremely solid, a factor making it of great importance as a canning tomato. It will stand up in the can far better than the conventional sorts. Thousands of acres of Stokescross No. 5 will be grown in 1951.

## *Price of Seed:*

\$5.00 per ounce. There are no apologies for this price. Each ounce contains over 5,000 seeds. This seed in official New Jersey State Seed Laboratory tests averages 95 to 98% germination. One ounce of seed, therefore, will plant more than one acre. Several 1950 reports tell us of Stokes-cross crops grossing in excess of \$500 per acre. No one will hesitate to spend 1% for that kind of tomato seed. Garden packets (approx. 200 seeds) are 50¢. Trade packets (approx. 500 seeds) are \$1.00.



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# **RULES FOR SUCCESS WITH STOKESCROSS HYBRIDS:**

1. **Plant them in your best soil.** Test this for all elements, and add deficiencies in your formula. Don't overlook boron. Keep building up for organic matter.

2. **Feed them heavily**—2000 lbs. per acre, of the correct formula, with half of this in two or three side dresser applications.

3. **Avoid a transplanting set-back.** Handle quickly and with starter solution. No tomato plant ever fully recovers from a set-back.

4. **Early plants means early harvest.** Remember that it is the warm sunshine of August that ripens the sweetest tomatoes.

5. **You must spray.** Early Blight, Late Blight, and insects are here to stay. Both crop and flavor go when the foliage goes.

6. **Help your blossoms to set.** Avoid an over-vegetative vine. Go slow on your nitrogen applications until the first two hands show fruit. Ditto on irrigation.

7. **Dodge September weather.** Mature as much of your crop in August as is possible. The five Stokes-cross Hybrids will help. Make your choices with care.

8. **Maintain fruit size.** There are four factors—heredity, spacing, continued feeding and irrigation. All of these rate your best thought.

9. **Reduce fruit cracking.** Again maintain foliage. Stokes-cross No. 3, No. 4 and No. 5 have all shown a definite reduction in cracking.

10. **Secure top market. Pack top grade.** Never forget quality. It is up to you to maintain the integrity of your pack. You are the manager. Hybrids have a quality of their own. Give them your best.





*In Stokes Proving Grounds.*



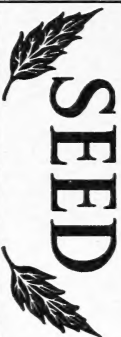
*The Plant is the unit.*

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THE MARK OF THE BEST

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Breeders and Growers of Fine Tomato Seed

Vincentown, New Jersey, U.S.A.

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